NEWS.

PROFESSOR W. BELAJEFF, of the University of Warsaw, has been appointed director of the botanic garden of Warsaw.

Miss Anna Arma Smith has been appointed assistant in botany in Mt. Holyoke College.

DR. A. O. KIHLMAN, docent in the University of Helsingfors, has been promoted to an assistant professorship of botany.

OIL DISTILLED from birch tar is coming into increased use for imparting the characteristic odor of Russia leather to all sorts of thin leather in the manufacture of fancy articles.¹

MR. EDWIN B. ULINE has just received the Doctor's degree from the University of Berlin, where he has been at work for two and a half years. He will return to America early in January.

ATTENTION is called to the fact that the authorized agent in Germany for the BOTANICAL GAZETTE is now the well-known publishing firm of Gebrüder Borntraeger, 46, den Schönebergerstrasse 17a, Berlin, S. W.

THE STATES of Michigan, New York, and Indiana, together with a few scattered localities, produced this year about 250,000 kilos of peppermint oil, as against less than 200,000 for 1896. About one-third the total product is sent to Germany.

THE SETS of Colorado plants prepared by Mr. C. F. Baker during 1896, and advertised in this journal, have all been sold. The specimens were well selected and preserved, and were mostly purchased by the larger institutions and added to the working herbaria.

The NINTH SECTION of the wall charts of Professor Kny, consisting of plates 91-100, has recently been issued by Paul Parey, Berlin. These illustrate the structure and development of the glandular hairs of lupine; the pollination of Aristolochia Clematitis; and the development of Aspidium Filix-mas. To the latter, eight of the ten plates are devoted.

THE WASTE CEDAR from lead pencil factories is the chief source of the raw material for the distillation of cedar oil, which is extensively used by

¹SCHIMMEL & Co., Semi-Annual Report, Oct. 1897, p. 7. 1897] manufacturers of cheap soaps. The demand for the oil is increasing so that this source threatens to become inadequate, in which case the wood in blocks will have to be used. This would make the oil four to six times as costly as at present, say Schimmel & Co.²

IN THE Popular Science Monthly for September there are three matters of botanical interest: (1) an illustrated account of the giant cactus, by Professor J. W. Toumey, who is certainly most competent to deal with such a subject; (2) an interesting paper on the scope of botany, by Dr. George J. Peirce, now of Stanford University; and (3) a sketch, with portrait, of Professor Samuel Lockwood, who was one of those charming old-time "naturalists" who are fast disappearing.

The treatise on diatoms which Dr. Henri van Heurck had long in preparation has just been published in England, translated by Mr. Wynne E. Baxter. It forms a handsome volume of 600 pages, illustrated by about 2000 figures. All recognized genera of the world, 192 in number, are figured and also representatives of many rejected genera. All species of the North sea and countries bordering thereon are figured and described. A French edition may be published provided enough subscriptions are obtained to promise its success.

THE MUSHROOM PLATES accompanying Mr. Charles H. Peck's report for 1894 as state botanist of New York, which excited so much interest when issued a few months ago that the edition was speedily exhausted, have been ordered by the Regents to be reprinted in an edition of 1000 copies in the form of wall charts. They can be had in sheets or mounted upon rollers. It is a pity that plates that have attracted so much attention and from which so much is expected are not less crudely executed. The coloring has only sufficient fidelity to nature to be remotely suggestive.

THE SECRETARY OF AGRICULTURE has included in his estimate of the expenditure for the coming year an item of \$20,000 to be set aside from the seed fund for the introduction of valuable economic plants. In case this expenditure is sanctioned by Congress, Mr. D. G. Fairchild will be put in charge of the work. If the scheme of seed distribution ever had in it a scientific purpose, that purpose will certainly be carried out more wisely by this method suggested by the Secretary. The importance of such work no one, can doubt, and the fitness of Mr. Fairchild, who has traveled so extensively, is at once apparent.

THE BIOLOGICAL SURVEY of Alabama is being developed and extended as rapidly as limited means will permit. Over 20,000 specimens have been added to the herbarium collections during the present year, including fine

² Ibid. p. 13.

series of mosses, lichens, and hepatics. Much of the success of the work is due to the activity and devotion of Professor F. S. Earle, and Mr. Carl F. Baker of the Alabama Polytechnic Institute and botanists of the survey. It is contemplated to offer sets of exsiccatae at about \$7.00 per hundred, and also to make exchanges to some extent, in order to provide additional funds and material for the herbarium.

GEBRÜDER GOTTHELFT, of Cassel, announce the early publication of a new set of wall charts in five series: 1, physiology; 2, anatomy; 3, taxonomy and phylogeny; 4, morphology; 5, diseases. Dr. F. G. Kohl, professor of botany in the University of Marburg, will prepare the original drawings or select those of other authors to be reproduced. These will be largely from photographs. A larger size than usual, 85×115^{cm} will allow the lines to be coarse enough to be seen in a large lecture hall. The price is to be reasonable, viz., M 5 per chart, unmounted; if mounted with rings and roller, M 2 additional. Single charts may be purchased, or any series. Sample plates will be sent free on request.

THE APPEARANCE of the *Plant World* justifies its announcement. Two numbers are now before us, and a statement of contents is the best sort of comment. The October number contains "The sword moss," by Mrs. E. G. Britton; "The families of flowering plants," by Charles L. Pollard, the beginning of a series of articles; "Sensitiveness of the sundew," by F. H. Knowlton; "Ferns of the Yosemite and the neighboring Sierras," by S. H. Burnham; "Some sand-barren plants," by Willard N. Clute. There is also an editorial department and one of "notes and news." The November number contains articles by F. H. Knowlton, Charles L. Pollard, A. A. Heller, Arthur Hollick, and W. J. Beal. We hope that the journal has "come to stay."

The following reliable information about the cultivation of orris (Iris florentina L.) may be of interest, as it is of great importance to the perfumery industry and little has been known about it. The cultivation of this plant has been going on in Italy for two centuries. It is planted on hills and hill-sides, never in valleys; mostly on sunny clearings or lengthwise between rows of vines in vineyards, seldom in extensive fields. It grows only in dry stony ground. Once planted, the plants need no further care and are left undisturbed for two or three years. Then the gathering of the rhizomes commences. Half the last joint is left on the living plant, which is replanted in new ground at once or within a fortnight. The freshly cut rhizomes are first placed in water to facilitate peeling, after which they are dried in the sun. 100 kilos of green rhizomes make 30-40 kilos of dried. The Tuscany districts will yield this year about 1,250,000 kilos.³

³ Schimmel & Co., Semi-Annual Report Oct. 1897, p. 38.

THE BAUSCH & LOMB OPTICAL Co. announce their intention to begin the publication, on January 1, of an octavo sixteen-page monthly periodical devoted exclusively to the science involving the use of the microscope, particularly in the line of practical methods of working, the description of new apparatus and the recording of new uses for already described appliances, new and useful formulæ for staining, fixing, mounting, etc., news about prominent men and institutions both domestic and foreign, correspondence and criticism and current literature. The paper and printing are to be of the best, and accurate illustrations will be provided when required.

It is proposed to conduct this journal in the most conservative manner as to the accuracy and practical value of the matter. As there is at present no publication in this country devoted to the above mentioned subjects exclusively, the company has been repeatedly urged to establish and maintain such a periodical. They hope to receive the hearty support of all interested in the advancement of science.